

contends that no objective evidence has been presented that the absorbent materials of WO ‘358 are different from the water-absorbing agent of the claimed invention. Applicants respectfully disagree with this position.

The previous response specifically identified the Examples of WO ‘358 and the Examples of the present specification to identify the similarities and differences between the product of WO ‘358 and the product of the present invention. In particular, it was specifically pointed out that the Example of WO ‘358 is substantially the same as Comparative Example 6 of the present specification. The data in Table 2 of the specification demonstrate that the water-absorbing resin of Comparative Example 6 which corresponds to the Example of WO ‘358 has a gel deformation outside the claimed range. Therefore, objective evidence is present in the record to show the differences between the claimed invention and the resulting product of WO ‘358.

Appended hereto is a Declaration by one of the inventors comparing the water-absorbing material of WO ‘358 with the water-absorbing agent of the claimed invention. As pointed out in the previous response, the water-absorbing resin particles produced according to WO ‘358 correspond to the water-absorbent resin particles C-2 produced in Comparative Referential Example 3 and used in Comparative Example 6 of the specification. The resulting materials of Comparative Example 6 are outside the claimed values. Thus, the water-absorbent resin particles C-2 of Comparative Example 6 and the resulting water-absorbent resin particles of WO ‘358 are not within the scope of the claims.

In particular, water-absorbent resin C-2 is produced according to Comparative Referential Example 3 of the present specification. These water-absorbent resin particles are then used in Comparative Example 6. The Declaration presents comparative test data to compare the properties of the water-absorbent resin particles of WO ‘358 and the water-absorbent resin particles C-2. Example 2 of WO ‘358 identifies the absorbent gelling particles

as being obtained under the trade name Aqualic CA L761f (lot # 4N22-029). Applicants obtained a sample of Aqualic CA L761f (lot # 9R05-007). Applicants proceeded to compare the properties of L761f (lot # 9R05-007) and the water-absorbing resin C-2 according to the procedure described in the specification of the present application and according to the procedure of WO '358. Table 1 of the enclosed Declaration shows the measured values for these products. The Declaration presents the comparative data for the same product although the lots are not the same. Applicants submit that any differences between the lots are insignificant.

An absorbent material was then prepared according to Example 3 of WO '358 using L761f (lot # 9R05-007). The properties of the resulting water-absorbing agent were then measured according to the procedures described in the specification and WO '358. The results and the values are shown in Table 2 of the Declaration.

As shown in Tables 1 and 2 of the Declaration, water-absorbent resin L761f of WO '358 is substantially the same as the water-absorbing resin C-2 obtained according to Comparative Referential Example 3 of the present application since the properties are essentially the same. In particular, the data of Table 1 shows that the gel volume in saline, the gel volume using Jayco synthetic urine, the AAP and the SFC are substantially the same with any differences being well within the normally accepted tolerances. Thus, it is clear that the water-absorbent resin particles of WO '358 are the same as the water-absorbent resin particles C-2 of Comparative Referential Example 3 of the specification.

Table 2 shows that the resulting water-absorbing agent obtained from water-absorbing resin C-2 and the absorbent material of WO '358 are substantially the same. Therefore, it is clear that the Example of WO '358 corresponds to water-absorbing resin C-2. As noted in the previous response and in the specification, water-absorbing resin C-2 does not have the claimed properties. Therefore, the resulting water-absorbing resin particles of WO '358 also do not have the claimed properties. The water-absorbing resin C-2 is produced according to Comparative

Referential Example 3 which is used to produce the water-absorbing agent of Comparative Example 6. As shown in the specification, the gel deformation under load (16 hrPT) of the water-absorbent resin C-2 obtained from Comparative Example 3 is higher than that of the water-absorbing agent of Comparative Example 6. As shown in Table 2 on page 79 of the specification, Comparative Example 6 has a gel deformation of 15.7. Claim 58 specifically recites that the resulting water-absorbent agent has a gel deformation of not more than 12.5. Thus, it is clear that the resulting material of WO ‘358 corresponds to the water-absorbing agent of Comparative Example 6 and does not inherently have the claimed properties. Accordingly, the claims are not anticipated by or obvious over WO ‘358.

Also as shown in Table 2 on page 79 of the specification, the water-absorbing agent of Comparative Example 6, and thus the water-absorbing agent of WO ‘358 has 16 hrBBS of 43.5 gf. Claim 54 specifically recites that the water-absorbing agent exhibits 16 hrBBS of not less than 80 gf. Therefore, the data demonstrates that the resulting material of WO ‘358 does not inherently have the claimed properties recited in claim 54. Accordingly, claim 54 and the claims depending therefrom are not anticipated by or obvious over WO ‘358.

Table 2 on page 79 also shows that the water-absorbing agent of Comparative Example 6 has a ΔPT of 4.7 cm. Claim 60 specifically recites that the water-absorbing agent exhibits ΔPT of not more than 3.5 cm. Accordingly, Table 2 demonstrates that the resulting absorbent material of WO ‘358 does not inherently have the properties recited in claim 60. Thus, claim 60 and the claims depending therefrom are not anticipated by or obvious over WO ‘358.

Claim 67 specifically recites that the water-absorbing agent exhibits DBBS of not more than 40%. Table 2 on page 79 of the specification demonstrates that the water-absorbing agent of Comparative Example 6 and thus the water-absorbing material of WO ‘358 has DBBS of 52.8%. Accordingly, the resulting material of WO ‘358 does not inherently have the properties

recited in claim 67. Thus, claim 67 and the claims depending therefrom are not anticipated by or obvious over WO '358.

The data presented in Table 2 of the Declaration also show that the absorbent material obtained according to WO '358 has a 16 hrBBS, a ΔPT and a DBBS that are outside the claimed range of claims 54, 60 and 67. Thus, the data in the attached Declaration demonstrate the differences between the resulting product of WO '358 and the claimed invention.

The present invention is directed to a water-absorbing agent having specific properties that are not inherently found in WO '358. The claimed properties are determined by the water-absorbent resin particles and the cationic polymers noted on page 22 of the specification. The resulting water-absorbent resin particles preferably have an absorption capacity under load (AAP) of not less than 20 g/g. The high absorption capacity and absorption under load are required to prevent migration or leaking from the water-absorbent resin during use. The saline flow conductivity of the claimed water-absorbing agent is not less than 20. The saline flow conductivity influences the liquid permeability of the water-absorbing agent, the absorption rate and the absorption capacity to reduce leaking of liquid from the water-absorbing agent.

Water-absorbent resin particles A-2 as disclosed in Table 1 of the specification have a gel volume (GV) of 29.2, an absorption capacity under load (AAP) of 25.1, and a saline flow conductivity (SFC) of 40. The water-absorbent resin particles of the present invention preferably have a high absorption capacity under load and a high saline flow conductivity. The high absorption capacity under load and the high saline flow conductivity in combination with the cationic polymer provide the desirable gel deformation under load and the ball burst strength of the resulting water-absorbing agent of the present invention. These features are not disclosed or suggested in WO '358.

In view of the above comments and the data presented in the attached Declaration, WO '358 does not anticipate or render obvious the claimed invention. In particular, WO '358 does

not expressly or inherently disclose a water-absorbing agent exhibiting a free swelling capacity (GV), an absorption capacity and a gel deformation as recited in claim 48. WO '358 further fails to disclose the ball burst strength of claim 49, the gel deformation of claim 50, or the water-absorbing agent containing an inorganic powder as in claim 53.

The water-absorbing material of WO '358 also does not inherently have a free swelling capacity, absorption capacity or ball burst strength of not less than 80 gf (16 hrBBS) as in claim 54, the ball burst strength of claim 55, the gel deformation deterioration of claim 56 and the inorganic powder of claim 59 in combination with the features of claim 54. Therefore, claim 54 and the claims depending therefrom are not anticipated by or obvious over WO '358.

Independent claim 60 is directed to a water-absorbing agent comprising a polymer where the water-absorbing agent has a free swelling capacity of not less than 23 g/g, a gel deformation of not more than 12.5 cm under short time load, and a gel deformation deterioration of not more than 3.5 cm under load with the passage of time. As discussed above, the resulting water-absorbing material in WO '358 does not inherently exhibit these claimed properties. In particular, the data in Table 2 of the Declaration demonstrates that the resulting product of WO '358 does not have the claimed gel deformation of not more than 3.5 cm under load with the passage of time ΔPT as claimed. The product of WO '358 also does not have the absorption capacity recited in claim 61, the gel deformation of claim 62 or the ball burst strength of claim 63 so that these claims are not anticipated or obvious over WO '358.

WO '358 also does not produce a water-absorbing material which inherently exhibits a DBBS of not more than 40% as in claim 67. Accordingly, claim 67 and claims 68-70 and 73 which depend from claim 67 are allowable over the art of record. Claims 78-81 and 86-89 depend from claims 48, 54, 60 or 67 to recite the water-absorbent structure comprising the water-absorbing agent of the independent claims. These claims are allowable for the same reasons with respect to the independent claims.

In view of the above comments and the enclosed Declaration, the claims are submitted to be allowable over the art of record. Accordingly, reconsideration and allowance are requested.

Respectfully submitted,



Garrett V. Davis
Reg. No. 32,023

Roylance, Abrams, Berdo & Goodman, L.L.P.
1300 19th Street, N.W., Suite 600
Washington, D.C. 20036
(202) 659-9076

Dated: June 26, 2005